Package ‘ROpenCVLite’

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Type Package
Title Install ‘OpenCV’
Version 0.3.412
Maintainer Simon Garnier <garnier@njit.edu>
Description Installs ‘OpenCV’ for use by other packages. ‘OpenCV’ <https://opencv.org/> is library of programming functions mainly aimed at real-time computer vision. This ‘Lite’ version contains the stable base version of ‘OpenCV’ and does not contain any of its externally contributed modules.
License GPL-3
LazyData TRUE
Imports utils, pkgbuild, parallel
SystemRequirements cmake, C++11
RoxygenNote 7.0.2
Biarch true
Encoding UTF-8
Suggests knitr, rmarkdown
VignetteBuilder knitr
URL https://swarm-lab.github.io/ROpenCVLite/
https://github.com/swarm-lab/ROpenCVLite

BugReports https://github.com/swarm-lab/ROpenCVLite/issues

NeedsCompilation no
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ROpenCVLite-package

ROpenCVLite: A package to install OpenCV within R

Description

This is a utility package that installs OpenCV within R for use by other packages. This Lite version does not contain any of the contributed modules of OpenCV.

Author(s)

Simon Garnier, <garnier@njit.edu>

See Also

Useful links:

- https://swarm-lab.github.io/ROpenCVLite/
- https://github.com/swarm-lab/ROpenCVLite
- Report bugs at https://github.com/swarm-lab/ROpenCVLite/issues

installOpenCV

Install OpenCV

Description

This function will attempt to download, compile and install OpenCV on the system. This process will take several minutes.

Usage

installOpenCV(batch = FALSE)

Arguments

- batch: A boolean indicating whether to skip (TRUE) or not (FALSE, the default) the interactive installation dialog. This is useful when OpenCV needs to be installed in a non-interactive environment (e.g., during a batch installation on a server).
isCmakeInstalled

Value
A boolean indicating whether OpenCV was or not installed on the system.

Author(s)
Simon Garnier, garnier@njit.edu

Examples
## Not run:
installOpenCV()

## End(Not run)

isCmakeInstalled Check Cmake Installation

Description
This function checks that Cmake is installed on the system.

Usage
isCmakeInstalled()

Value
A boolean indicating whether Cmake was or not installed on the system.

Author(s)
Simon Garnier, garnier@njit.edu

Examples
isCmakeInstalled()
isOpenCVInstalled  

*Check OpenCV Installation*

**Description**

This function checks that OpenCV is installed within the R library.

**Usage**

```r
isOpenCVInstalled()
```

**Value**

A boolean indicating whether OpenCV was or not installed on the system.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```r
isOpenCVInstalled()
```

opencvConfig  

*C++ configuration options*

**Description**

Determines the configuration options for compiling C/C++-based packages against OpenCV installed by *ROpenCVLite*.

**Usage**

```r
opencvConfig(output = "libs", arch = NULL)
```

**Arguments**

- `output` Either 'libs' for library configuration options or 'cflags' for C/C++ configuration flags.
- `arch` Architecture relevant for Windows. If NULL, then `R.version$arch` will be used.

**Value**

A concatenated character string (with `cat`) of the configuration options.
opencvVersion

Author(s)
Simon Garnier, <garnier@njit.edu>

Examples
if (isOpenCVInstalled()) {
  opencvConfig()
  opencvConfig(output = "cflags")
  opencvConfig(arch = R.version$arch)
}

opencvVersion  OpenCV version

Description
Determines the version of OpenCV installed within R.

Usage
opencvVersion()

Value
A character string with the version of OpenCV installed by ROpenCVLite.

Author(s)
Simon Garnier, <garnier@njit.edu>

Examples
if (isOpenCVInstalled()) {
  opencvVersion()
}
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